

Physical Characteristics

Climate

Erie County experiences a fairly humid, continental-type climate, with moderate summers and cool winters. The climate is highly variable, and extreme or rapid weather changes can occur. Precipitation averages 40 inches per year and is strongly influenced by air masses moving over Lake Erie, producing “lake effect” snows in winter. Temperatures in the southern portion of the county, where most of the Erie County Forest properties lie, can often be as much as 10 degrees cooler than the northern urban areas. Summer humidity levels are moderate, and temperatures rise above 90° F usually only three times per year. Thunderstorms occur most often at night, and are more frequent in August. The mean annual temperature is 45.9° F, ranging from 23.2° F in February to 68.4° F in July.

Geology

The Niagara Region is located on a portion of a great plain which runs east to west from the northern Laurentian Highlands (Canadian Shield) approximately 100 miles north of Toronto, Ontario to the southern Allegheny Plateau, which forms the foothills of the Adirondack Mountains and Appalachian Mountains. The plain is a small part of the Great Lakes lowlands in which Lake Superior, Lake Michigan, Lake Huron, Lake Erie and Lake Ontario lie.

Continental glaciation played a modifying role in the development of New York's landscape in the recent geologic past. The Niagara Escarpment was covered with a sheet of ice, the Wisconsin glacier, 1 to 2 miles thick. On its advance south, the glacier removed and transported existing soils and eroded the surface of the bedrock. As the ice melted, this debris (mud, sand, gravel, and boulders) was left at new sites in a great variety of depositional landforms. Melting caused the glacier to retreat across New York State from south to north between 20,000 and 10,000 years ago. As the glacier retreated, the water levels slowly lowered, forming the predecessors to the Great Lakes, as the land began to rise in what is referred to as glacial rebound. During the period of glaciations and shortly afterward, the climate in Western New York was arctic. Vegetation was tundra and arctic fauna.



Wood products and limestone from Erie County Forest were used to construct this bridge to an island deep in the woods on Lot 2. Fifteen bridges were recently built to reconnect many miles of hiking trails.

Soils and Topography

The hilly uplands in the southern regions of Erie County are part of the Appalachian Plateau, carved into steep walled ravines and U-shaped glacial valleys by receding glacial melt water. Many of the meltwater rivers still exist, in the form of the many streams draining the southern hills of Erie County. In the low plains and valleys, bedrock is covered extensively by glacial till and by layers of sand, silt and clay deposited in meltwater lakes. Small areas of hydric soils can be found in the lowlands and on flattened hilltops. Bedrock in the county tilts slightly to the southwest. Southern Erie County is underlain by flat layers of siltstone, sandstone and shales, sedimentary rock of the Canadaway Group of the Upper Devonian, and is part of the Interior Lowlands, which extend westward to the Great Plains.

New York State Department of Environmental Conservation Priority Waterbodies List (1996)

The NYSDEC Division of Water periodically publishes a list describing the conditions, causes and sources of water quality problems for surface waters in New York State that cannot be used to their fullest potential as water resources. This list is often used as a basis for determining priority when natural resources planners are allocating financial and human resources to address environmental concerns.

The Priority Waterbodies List (PWL) contains documentation of the severity of impairment, listed as threatened, stressed, impaired or precluded (precluded being the most severe), and includes a listing of the types of pollutants and sources of pollutants. The PWL also suggests the resolution potential for each stream segment or waterbody as well as a brief summary of the concerns and any fish consumption advisories.

Each waterbody is assigned a Stream Class according to its best use. Class A and AA waterbodies are classified as drinking water sources. Class B waters are classified and regulated for swimming and contact recreation, but not as drinking water. Waters suitable only for fishing and non-contact activities are listed

as Class C. Waterbodies that support trout populations are given a further designation of (t), and trout spawning waters are designated (ts).

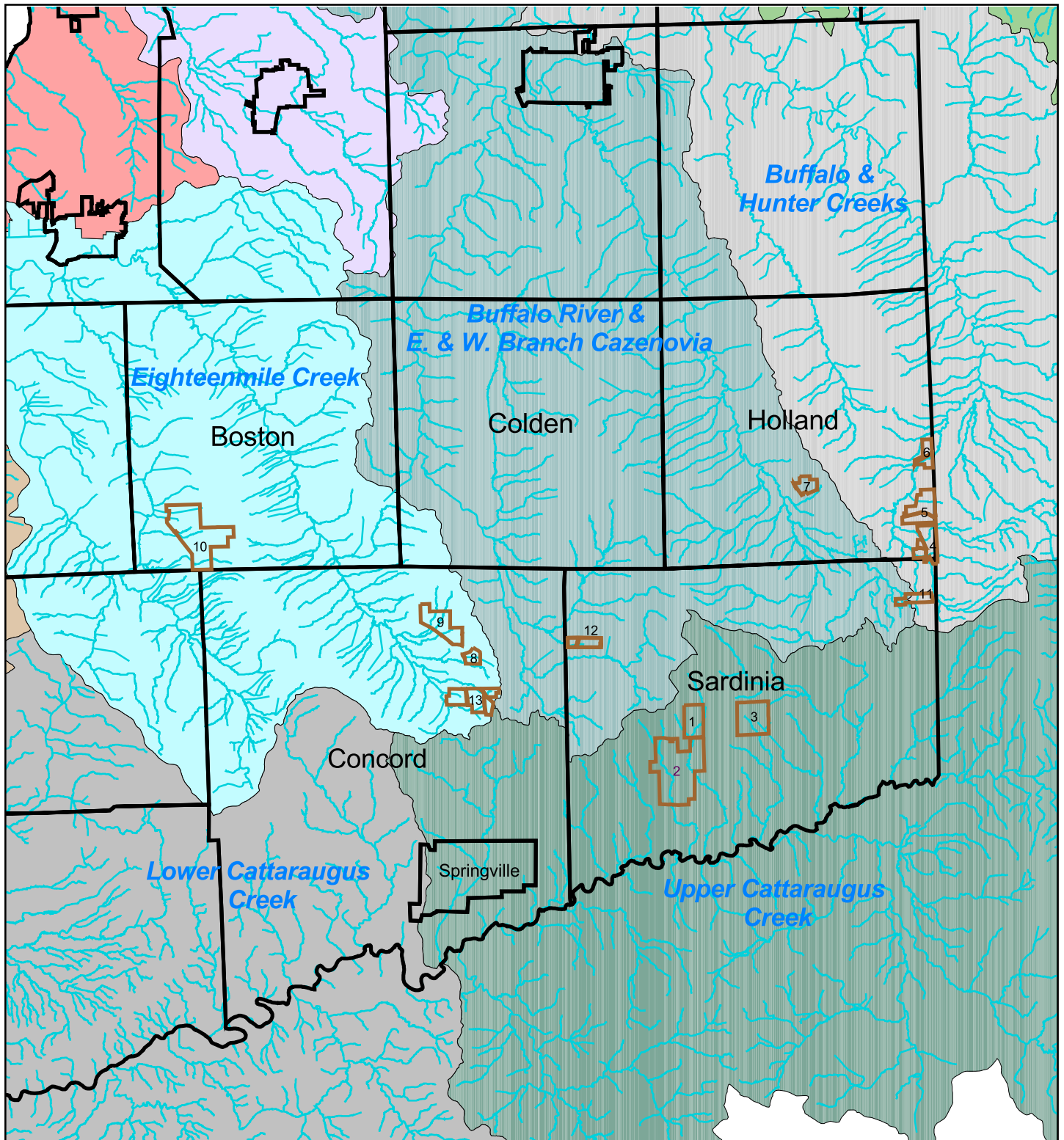
The Erie County Forest Lots lie within four watersheds as shown on the Watershed Map (following page 16). The use impairments and pollutants of concern for each Forest Lot are discussed in Section II—Forest Management Recommendations.

Soil Survey of Erie County, New York

The Erie County Soil Survey contains maps and descriptions of the soils and soil properties occurring throughout the county. The information can be used for land use planning, farming, forestry, construction, waste disposal, wildlife management, or any activity that affects the environment. The field work was conducted from 1967 to 1977 by the USDA Soil Conservation Service (now the Natural Resources Conservation Service) and Cornell University Agricultural Experiment Station. The soil descriptions are based on soil profiles of from many test pits dug and characterized countywide, and include soil texture, color, drainage, permeability, horizon depth, suitability and potential for specific uses and other characteristics. Field sampling is supplemented with laboratory analysis of soil properties. Soil areas mapped in the survey also include steepness, length and shape of slopes.

The soil types are named according to nationwide uniform procedures, called map units. Each map unit shown on the soil maps represents an area on the landscape consisting of the one or more soils for which the unit is named. The first two letters of a map unit name identify the soil name, and the third letter, when present, identifies the slope. For example, LfB is the Langford channery silt loam, 3-8% slopes, while LfC is the Langford channery silt loam, 8-15% slopes. Soil types that lack a slope identifier usually occur only in flat areas.

Soil descriptions have been included for each of the Erie County Forest Lots; complete descriptions and their suitability for specific uses may be found in the Soil Survey of Erie County, New York.



Erie County Forest Management Plan

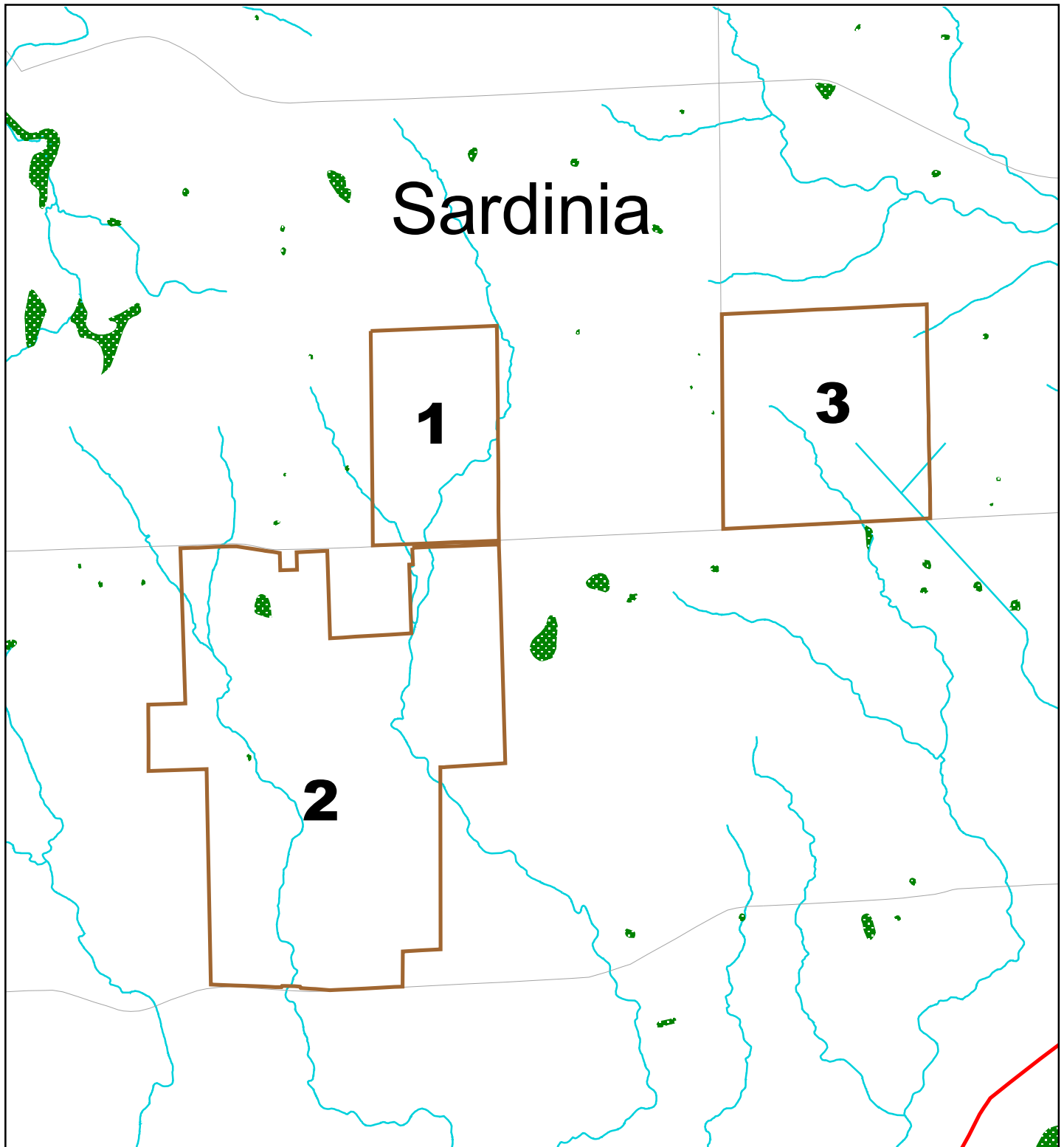
Watersheds



Map Prepared By:
Erie County Soil and Water
Conservation District



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


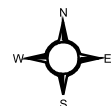
STATE AND NATIONAL WETLAND DESIGNATIONS

Erie County Forest Management Plan




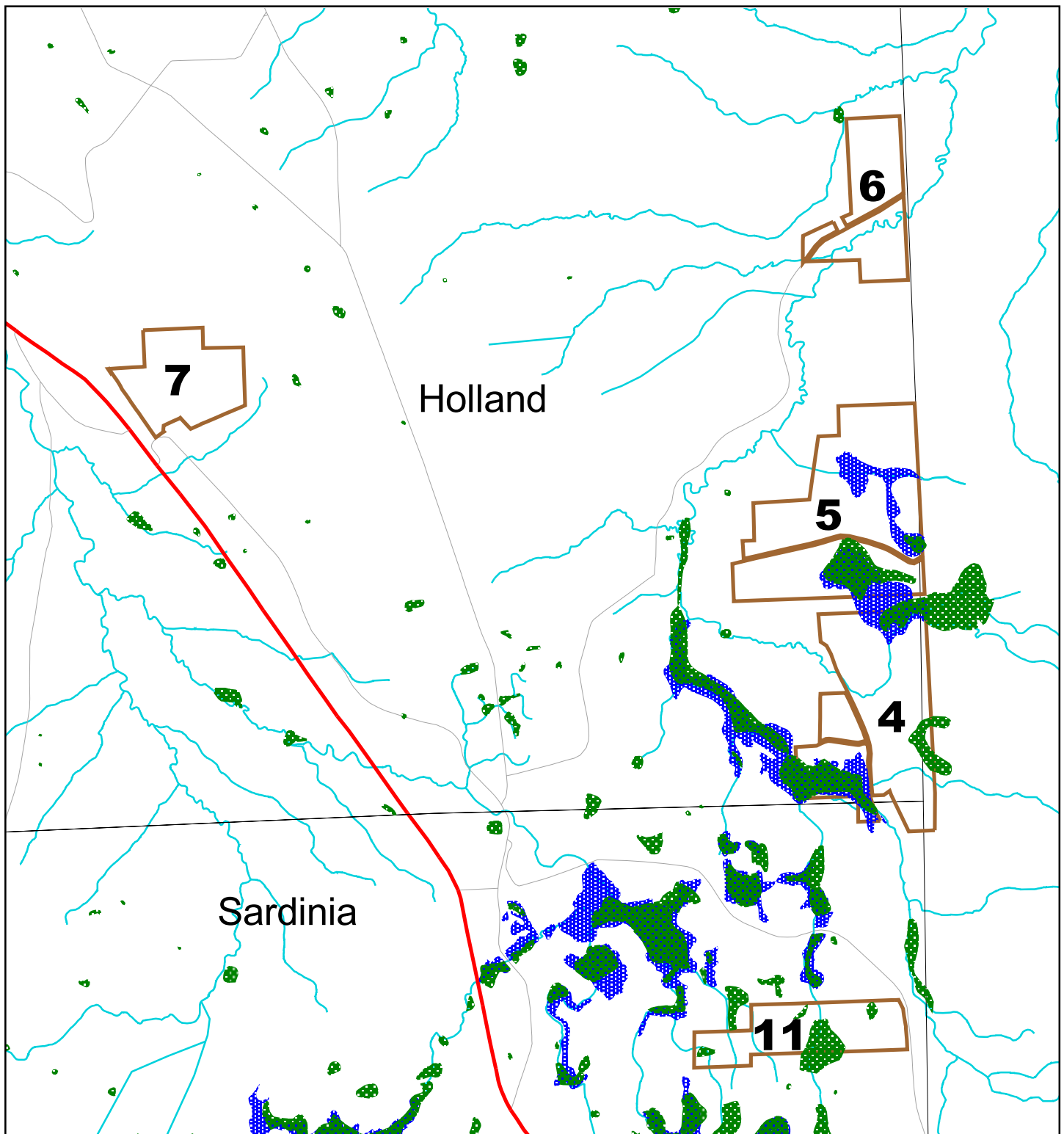
Map Prepared By:
Erie County Soil and Water
Conservation District

	Wetlands		Forestry Lots
	County Road		Interstate
	Federal Route		NY State Route
	National Wetlands Inventory		



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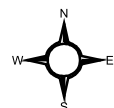
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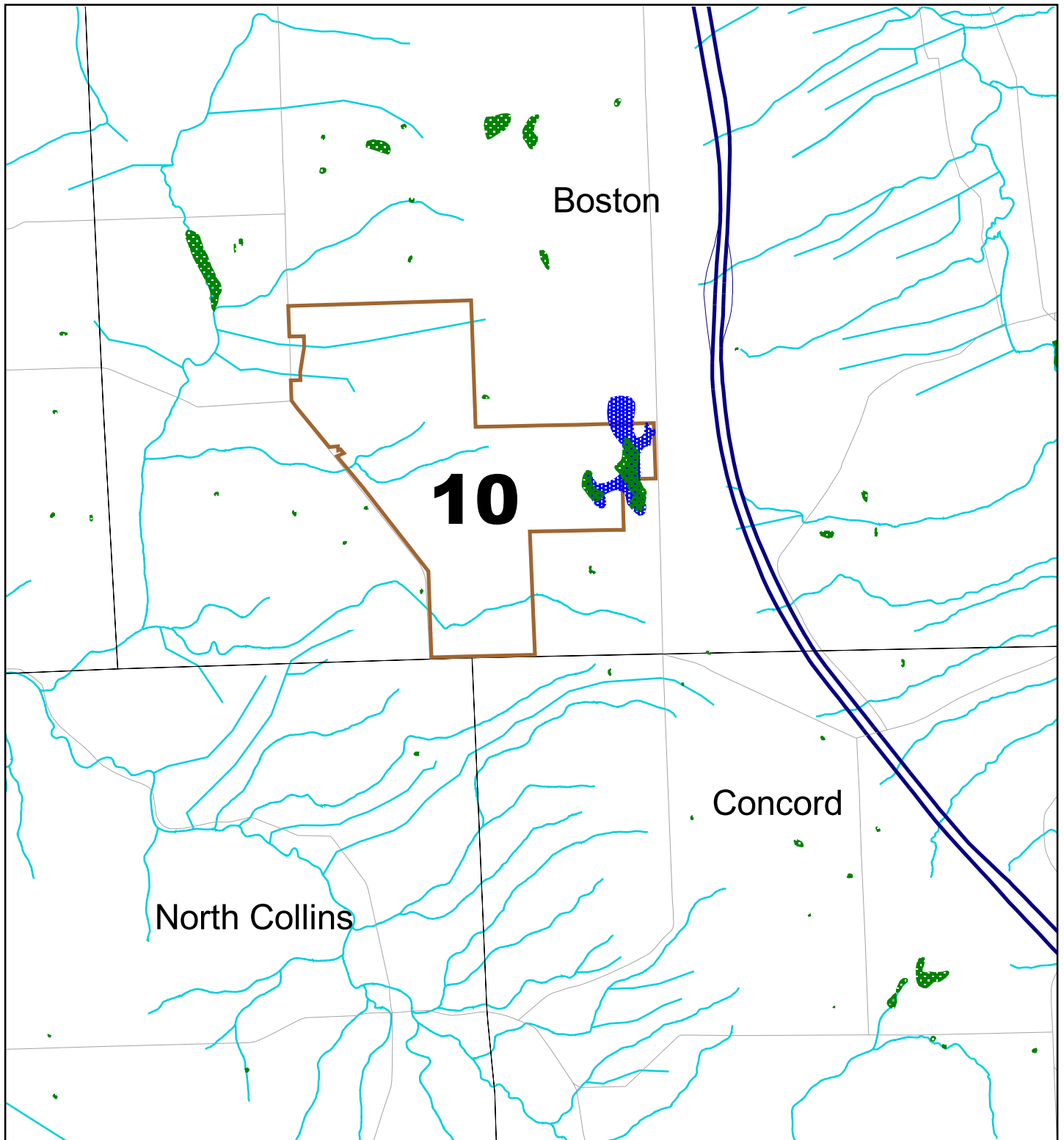


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400 0 400 800 Feet










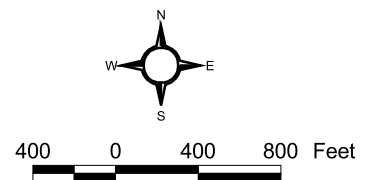
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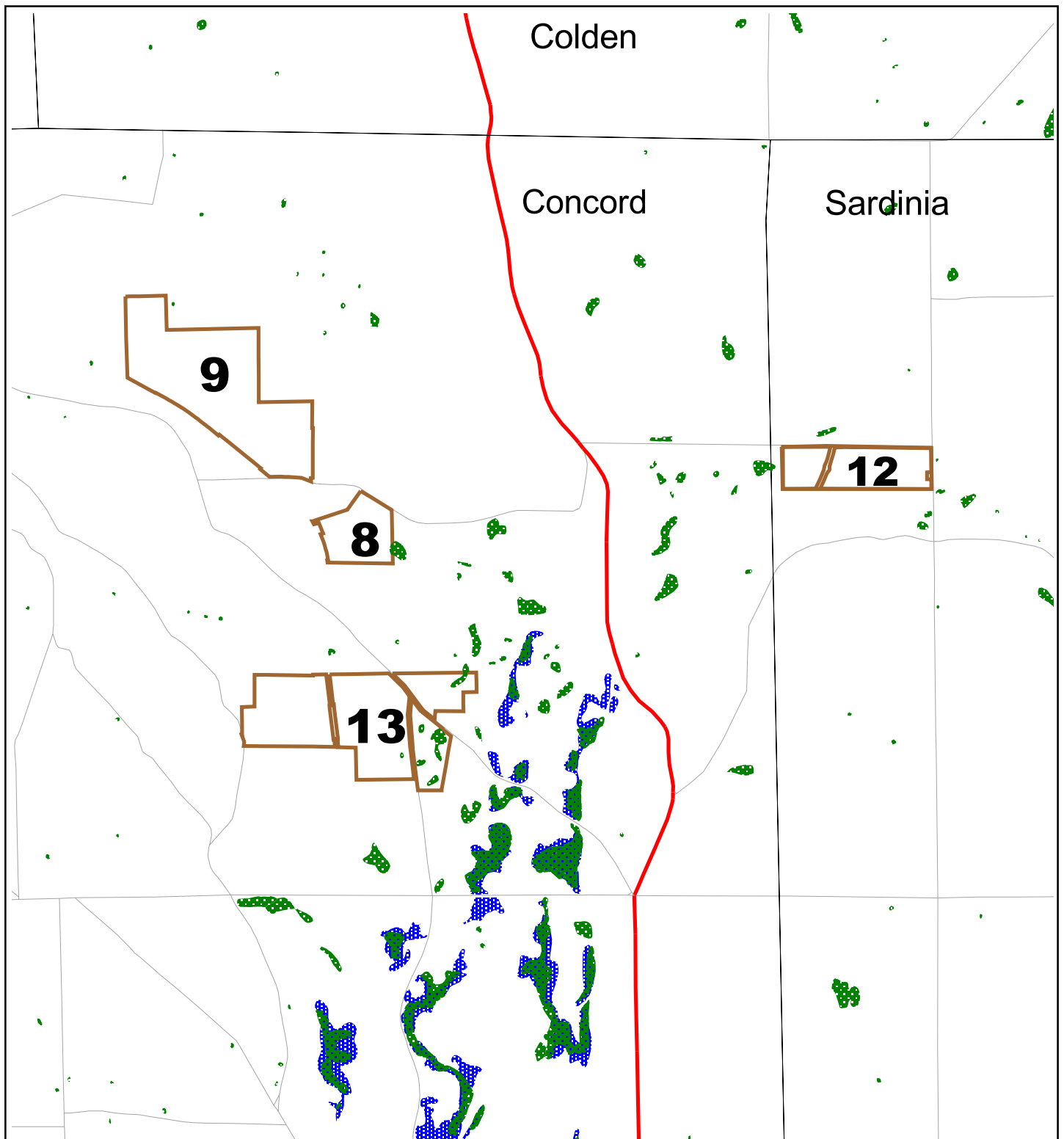
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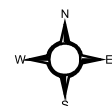
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600 0 600 Feet

